IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of)	**MAIL STOP RCE**
)	
Barbro Moberg-Alehammar et al.)	Group Art Unit: 3761
)	
Application No.: 10/788,446)	Examiner: MICHELE M. KIDWELL
)	
Filed: March 1, 2004)	Confirmation No.: 9994
)	
For: ABSORBENT ARTICLE WITH)	
IMPROVED SURFACE MATERIAL)	
)	
)	
)	

Declaration of Barbro Moberg Alehammar Under 37 CFR § 1.132

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I, Barbro Moberg Alehammar, hereby declare to the best of my recollection under penalty of perjury as follows:

1. I am an employee of SCA Hygiene Products AB, employed since 1997. I work as a product developer/research scientist.

2. I earned a master degree in chemical engineering from Chalmers University of technology 1982.

3. I conducted tests on the following six layers, four cover layers and two transfer layers:

> (1) A Cover Layer with a PVDmax at 65 μm and a contact angle of 123° made from polypropylene and made by Freudenberg;
>
> (2) A Cover Layer with a PVDmax at 65 μm and a contact angle of 0° made from polypropylene and made by Freudenberg and thereafter treated (sprayed) with 1% syntesin;
>
> (3) A Cover Layer with a PVDmax at 35 μm and a contact angle of 125° made from polypropylene and made by Fiberweb;
>
> (4) A Cover Layer with a PVDmax at 35 μm and a contact angle of 0° made from polypropylene and made by Fiberweb;

(5) A Transfer Layer with a PVDmax of 147 μm made from polyester and made by Freudenberg; and

(6) A Transfer Layer with a PVDmax of 20 μm made from polypropylene/polyamide (splitfibre) and made by SCA.

4.   The PVD max is the pore radius corresponding to the maximum pore volume distribution. For details how the PVD measurements are done see patent application page 3-4

5.   The contact angle was determined by using Dynamic Absorption Tester (DAT) as mentioned in paragraph [0042] to paragraph [0047] in the patent application page 3

6.   Wetting angle measures the interaction of a liquid and a material surface. A wetting angle of less than 90° means a surface is wettable. A wetting angle greater than 90° means a surface is nonwettable. 90° is a threshold point - in that a change from below 90° to above 90° is a significant change.

7.   I conducted the following three tests on combinations of the layers:

(A) Liquid-Admission Speed;

(B) Amount of Liquid Residuals; and

(C) Dryness

8.   Liquid-Admission Speed was determined by measuring the time between start and when all liquid (15 ml) had been absorbed by the test material. The method is described in US 6,138,500 which is a corresponding document to GB 2 339 477 referred to in the application in suite.

9.   Amount of Liquid Residuals was determined by weighing the test material.

10.   Dryness was determined by sensory evaluation of the test material.

11.   I tested the following combinations:

(a) Cover Layer (1) and Transfer Layer (5)

(b) Cover Layer (2) and Transfer Layer (5)

(c) Cover Layer (3) and Transfer Layer (5)

(d) Cover Layer (4) and Transfer Layer (5)

(e) Cover Layer (1) and Transfer Layer (6)

(f) Cover Layer (2) and Transfer Layer (6)

(g) Cover Layer (3) and Transfer Layer (6)

(h) Cover Layer (4) and Transfer Layer (6)

	(a)	(b)	(c)	(d)
Liquid-Admission Speed (seconds)	1.5 s	1.8 s	2.3 s	2.3 s
Amount of Liquid Residuals (g/m^2)	~0 g/m^2	~12 g/m^2	~14 g/m^2	~25 g/m^2
Dryness (to the touch)	Dry to touch	Wet to touch	Wet to touch	Wet to touch

	(e)	(f)	(g)	(h)
Liquid-Admission Speed (seconds)	48 s	11 s	No results obtained - the combination did not let any fluid through	29 s
Amount of Liquid Residuals (g/m^2)	~57 g/m^2	~94 g/m^2	No results obtained - the combination did not let any fluid through	~58 g/m^2
Dryness (to the touch)	Wet to touch	Wet to touch	Wet to touch	Wet to touch

12.   I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 10001 of Title 18 of the United States Code and that such willful and false statements may jeopardize the validity of the application or any patent issued thereon.

Date: 20080912

By: B. Moberg Alehammar

Barbro Moberg Alehammar